

Ship 22 FEB

Work Order ID 141204

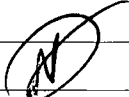
141204

Page 1

Monday, February 01, 2016 10:05:14 AM

Item ID: D205-541-051 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Automatic Lid Opener
 Start Date: 1/20/2016 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 2/1/2016 Req'd Qty: 1.00 *1* Customer:

Reference:

Approvals: Process Plan:  Date: 6-2-01 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSI 9710	A

100	DOCUMENT CONTROL	0.00	DAS 6 9-89						FEB 01 2016
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels as per PPP D205-541-051 Chg 001								

110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

FEB 04 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 141204***141204***

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Monday, February 01, 2016 10:05:14 AM

Item ID: D205-541-051

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Automatic Lid Opener

Start Date: 1/20/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/1/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D205-541-051

Location: _____

fg 121

FEB 04 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MCJ

FEB 05 2016

MCJ

FEB 05 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Monday, February 01, 2016 10:05:13 AM

Page 1

Work Order ID: 141204

141204

Parent Item: D205-541-051

D205-541-051

Parent Item Name: Automatic Lid Opener

Start Date: 1/20/2016

Required Date: 2/1/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 15.03.26 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3953-3		Manufactured	No				Each	26.0000		4		DAS 6 9-89	
D3953-3									**				DAS 28 9-89
Gas Spring Stud, Lid													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST0062				5					
				136645				5					
				ST064A				21					
				138388				21					
D3953-7		Manufactured	No				Each	62.0000		4		DAS 6 9-89	
D3953-7									**				DAS 28 9-89
Spring Spacer													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST062				2					
				137919				2					
				ST064A				60					
				138972				60					
D3953-9		Manufactured	No				Each	26.0000		4		DAS 6 9-89	
D3953-9									**				DAS 28 9-89
Gas Spring Washer													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST062				3					
				135544				3					
				ST064A				23					
				139013				23					

FEB 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 141204

141204

Parent Item: D205-541-051

D205-541-051

Parent Item Name: Automatic Lid Opener

Start Date: 1/20/2016

Required Date: 2/1/2016

Start Qty: 1.00

Required Qty: 1.00

D3953-17 Manufactured No Each 13.0000

D3953-17

Gas Spring Spacer

DAS

6
9-89

DAS

28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST062

13

136481

13

D3953-19 Manufactured No Each 44.0000

D3953-19

Gas Spring Bracket

DAS

6
9-89

DAS

28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST062

44

138913

44

D3953-21 Manufactured No Each 8.0000

D3953-21

Gas Spring Bracket

DAS

6
9-89

DAS

28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST063

8

132602

8

D3969-3 Manufactured No Each 25.0000

D3969-3

Spring (Basket Lid)

DAS

6
9-89

DAS

28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST365

25

137894

5

138889

10

140555

10

DAS

6
9-89

FEB 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Monday, February 01, 2016 10:05:14 AM

Page 3

Work Order ID: 141204

Parent Item: D205-541-051

Parent Item Name: Automatic Lid Opener

141204

D205-541-051

Start Date: 1/20/2016

Required Date: 2/1/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-14A

Purchased

No

Each

84.0000

AN3-14A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

over003

50

m133992

50

ST349

34

m133363

34

AN3-20A

Purchased

No

Each

27.0000

AN3-20A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

ST348

27

117441

27

AN310-4

Purchased

No

Each

93.0000

AN310-4

Nut

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

25

M127815

25

OVER007

25

M133990

25

ST331

43

M133483

18

M133790

25

DAS
6
9-89
DAS
28
9-89

DAS
6
9-89
DAS
28
9-89

DAS
6
9-89
DAS
28
9-89

FEB 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	

Root Cause	FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐	

Picklist Print

Monday, February 01, 2016 10:05:14 AM

Page 4

Work Order ID: 141204

141204

Parent Item: D205-541-051

D205-541-051

Parent Item Name: Automatic Lid Opener

Start Date: 1/20/2016

Required Date: 2/1/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

Each

2,453.000

MS21042L3

Nut

**

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

CCK007

2000

m134039

2000

FP001

163

m133790

163

GA

195

m133790

195

ST304

95

m133790

95

MS24665-231

Purchased

No

Each

165.0000

MS24665-231

cotter pin

**

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST289

165

113815

165

NAS1149F0363P

Purchased

No

Each

459.0000

NAS1149F0363P

WASHER

**

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST260a

459

124555

459

DAS

27

9-89

FEB 17 7 11 AM

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Picklist Print

Monday, February 01, 2016 10:05:14 AM

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Work Order ID: 141204

141204

Parent Item: D205-541-051

D205-541-051

Parent Item Name: Automatic Lid Opener

Start Date: 1/20/2016

Required Date: 2/1/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0463P

Purchased

No

Each

1,000.000

NAS1149F0463P

Washer

Location

Loc Qty

Loc Code

ST260a

959

m127832

959

st268

41

m127832

33

m130388

8

DAS

6

9-89

DAS

28

9-89

FEB 07 2016

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D205-541 REV. J &
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D205-541 REV. 4
REF. TCCA STC SH96-120,
FAA STC SR00696NY
EASA STC EASA.IM.R.S.01242

1.0 Purpose:

The purpose of this DSI is to provide operators of Bell 205/210/212/214/412 Rotorcraft equipped with Dart D205-541-043/-044/-045/-046 Heli-Utility-Baskets with an Upgrade Kit to replace the existing Lid Prop Arm Assembly with an Automatic Lid Opening Gas Spring Kit. The D205-541-051 Automatic Lid Opener Kit includes parts and hardware to install a gas spring on both ends of the basket.

2.0 Parts List:

ITEM No.	QTY -051	PART NUMBER	DESCRIPTION
	X	D205-541-051	AUTOMATIC LID OPENER KIT
1	4	D3953-3	GAS SPRING STUD
2	4	D3953-7	GAS SPRING SPACER
3	4	D3953-9	GAS SPRING WASHER
4	6	D3953-17	GAS SPRING SPACER
5	2	D3953-19	GAS SPRING BRACKET
6	2	D3953-21	GAS SPRING BRACKET
8	2	D3969-3	GAS SPRING
9	4	AN3-14A	BOLT
10	4	AN3-20A	BOLT
11	4	AN310-4	CASTELLATED NUT
12	8	MS21042L3	NUT
13	4	MS24665-231	COTTER PIN
14	16	NAS1149F0363P	WASHER
15	4	NAS1149F0463P	WASHER

*Note:

For customers wishing to order new baskets with the Lid Opener pre-installed, use the following numbers:

D205-541-043 BASKET with AUTOMATIC LID OPENER installed = D205-541-043A
D205-541-044 BASKET with AUTOMATIC LID OPENER installed = D205-541-044A
D205-541-045 BASKET with AUTOMATIC LID OPENER installed = D205-541-045A
D205-541-046 BASKET with AUTOMATIC LID OPENER installed = D205-541-046A

3.0 PROCEDURE:

For D205-541-043/-044/-045/-046 Heli-Utility Baskets, replace the existing Prop Arm Assembly with gas springs on both ends of the basket.

(NOTE: Once this modification is complete, it will not be possible to re-install the D2332-041 Prop Arm Assembly)

3.1 Remove the D2332-041 Prop Arm Assembly.

3.2 Grind flush the D2327-3 Spacer Bushing from the end of the basket base. Touch up paint per ICA-D205-541, Section 5.1.5.

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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 15.02.23
CERT. NO.: SH96-120
ISSUE NO.: 3

A	NEW ISSUE	DB	15.02.23
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9710	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		AUTOMATIC LID OPENER INSTALLATION	NTS
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- 3.3 Locate the D3953-17 Gas Spring Spacer on the basket lid per Figure 1 (-043/-044) or Figure 2 (-045/-046). Trim steel mesh locally as required. Transfer mark and drill 2X $\varnothing 0.194$ holes thru basket lid. Touch up paint per ICA-D205-541, Section 5.1.5. (Later model D2512 Basket Lids may be pre-drilled for gas spring brackets)
- 3.4 Install D3953-17 Gas Spring Spacer (qty 2) and D3953-19 Gas Spring Bracket to the basket lid using 2X AN3-20A bolts, NAS1149F0363P Washers and MS21042L3 Nuts as shown in Figure 3.
- 3.5 Locate the D3953-17 Gas Spring Spacer on the basket base as shown in Figure 1 (-043/-044) or Figure 2 (-045/-046). Trim steel mesh locally as required. Transfer mark and drill 2X $\varnothing 0.194$ holes thru the basket base. Touch up paint per ICA-D205-541, Section 5.1.5.
- 3.6 Install the D3953-17 Gas Spring Spacer and D3953-21 Gas Spring Bracket to the basket base using 2X AN3-14A bolts, NAS1149F0363P Washers and MS21042L3 Nuts, as shown in Figure 3.
- 3.7 Insert D3953-3 Gas Spring Studs through the D3953-19 and D3953-21 Gas Spring Brackets from the inside of the basket. (May be performed prior to 3.6 if necessary because of basket mesh).
- 3.8 Install a D3953-7 Spacer on to each stud followed by the D3969-3 Gas Spring, D3953-9 Gas Spring Washer, NAS1149F0463P Washer and AN310-4 Castellated Nut. To secure the nut, install a MS24665-231 Cotter Pin into the D3953-3 Gas Spring Stud. Install the Cotter Pin per MS33540 or AC43.13 Chapter 7-127.
NOTE: With the Lid in the closed position, the Gas Spring should **NOT** be fully compressed
- 3.9 Repeat the installation on the opposite end of the basket.
- 3.10 Test the installation. If installed properly, the Gas Springs should assist in both opening and closing the basket lid.

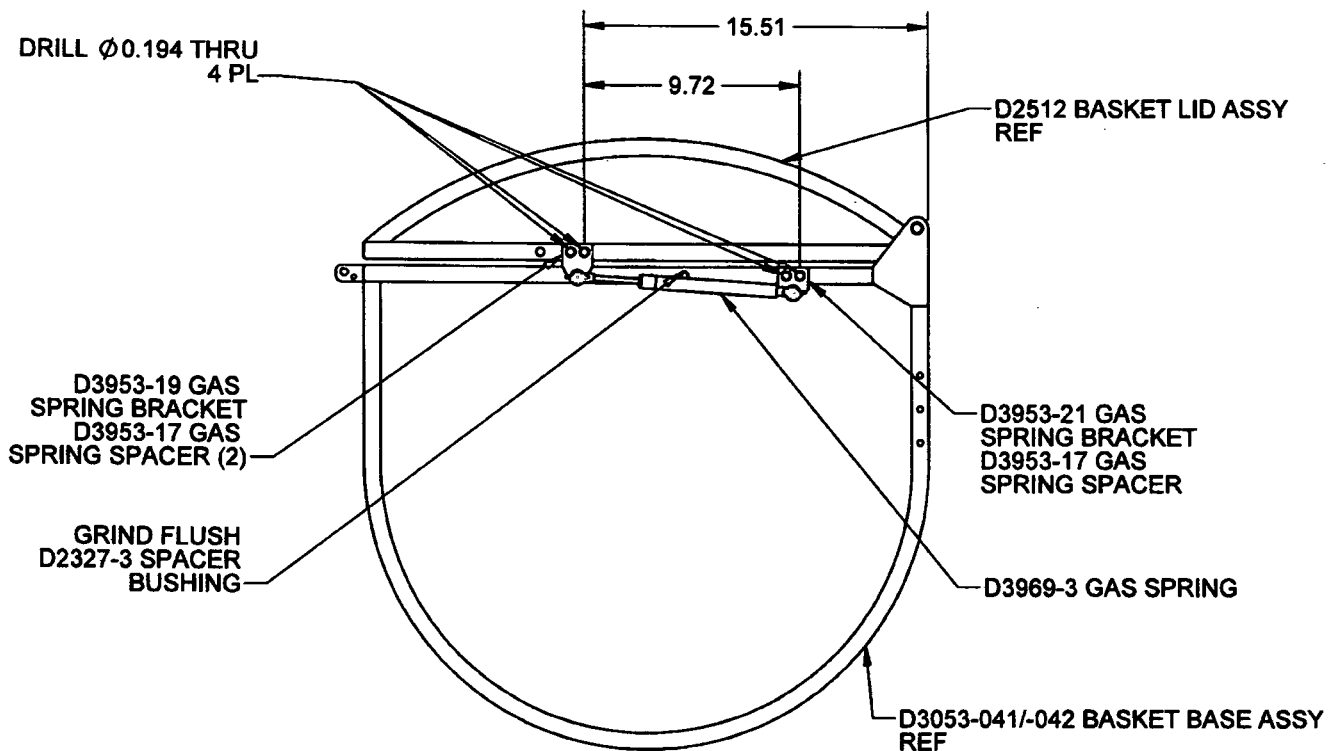


FIGURE 1: D205-541-051 AUTOMATIC LID OPENER INSTALLATION
(ON D205-541-043/-044 HELI-UTILITY BASKET, BOTH ENDS)

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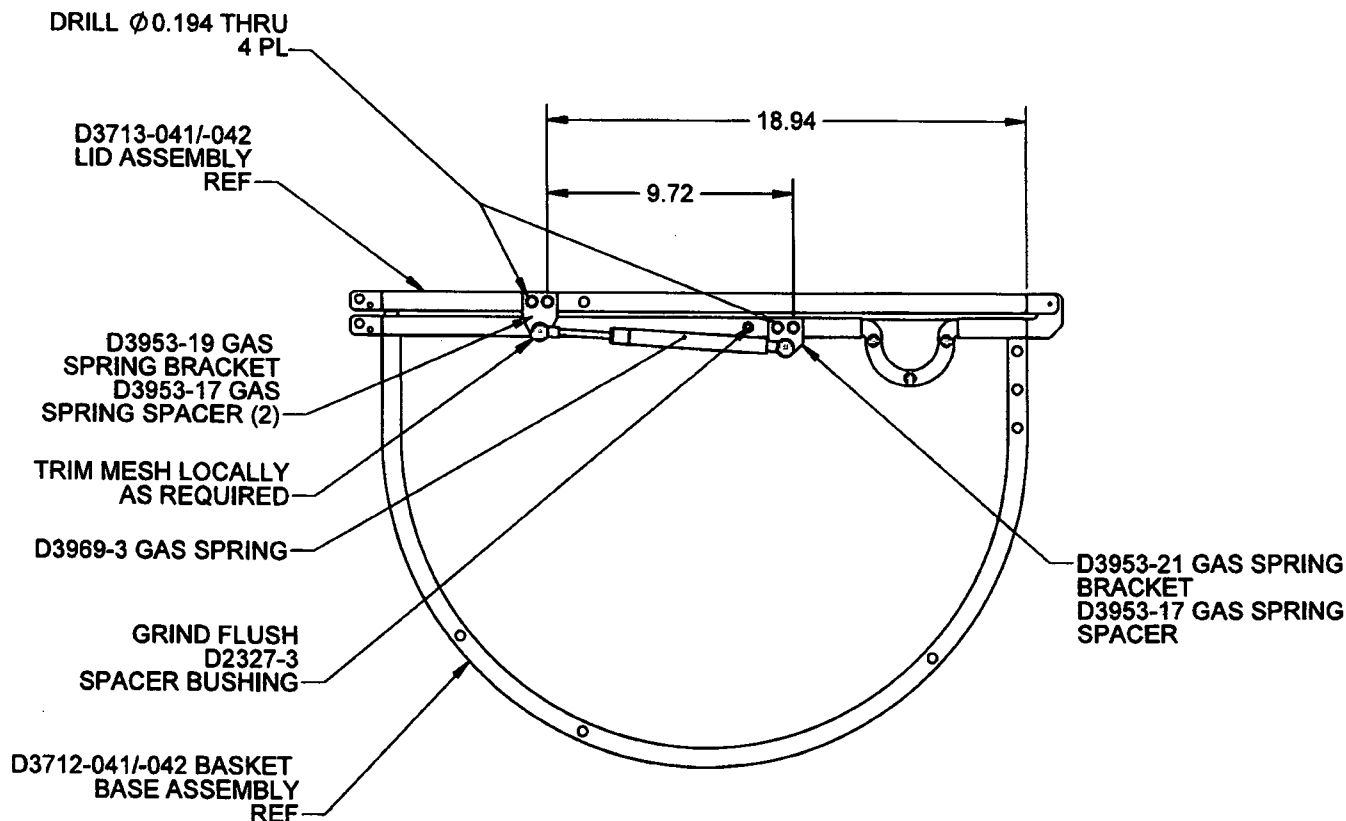


FIGURE 2: D205-541-051 AUTOMATIC LID OPENER INSTALLATION
(ON D205-541-045/-046 HELI-UTILITY-BASKET, BOTH ENDS)
(MESH NOT SHOWN FOR CLARITY)

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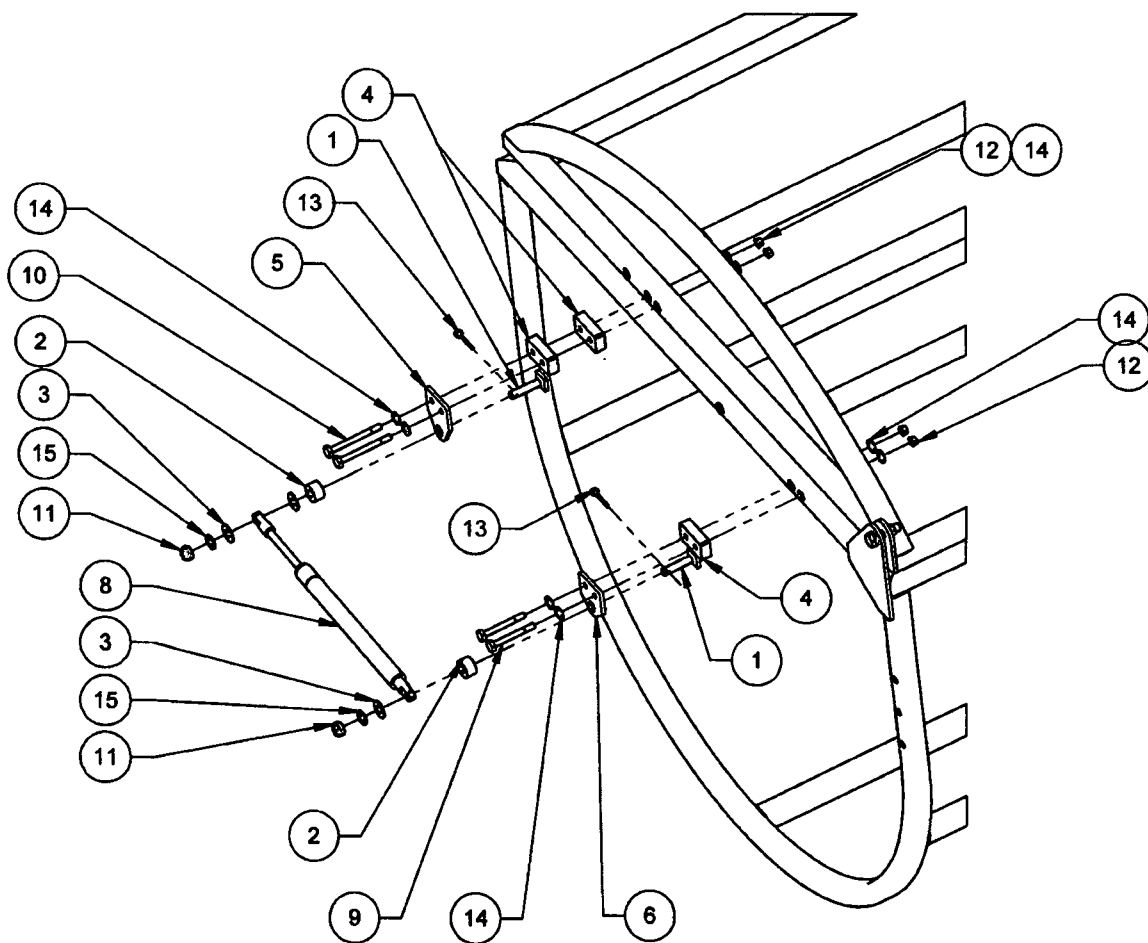


FIGURE 3: D205-541-051 GAS SPRING KIT INSTALLATION
 (ON D205-541-043/-044: LH SIDE, AFT END SHOWN/RH SIDE AND FWD END SIMILAR)
 (MESH NOT SHOWN FOR CLARITY)

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D205-541-051	0.66 lb	- 63.13 in	- 41.7 in-lb	132.25 in	87.3 in-lb
<i>Automatic Lid Opener Kit</i>	0.30 kg	- 1.60 m	- 0.5 m-kg	3.36 m	1.0 m-kg

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DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D205-541 REV. J &
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D205-541 REV. 4
REF. TCCA STC SH96-120,
FAA STC SR00696NY
EASA STC EASA.IM.R.S.01242

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*Note:

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D205-541-046 BASKET with AUTOMATIC LID OPENER installed = D205-541-046A

3.0 PROCEDURE:

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(NOTE: Once this modification is complete, it will not be possible to re-install the D2332-041 Prop Arm Assembly)

3.1 Remove the D2332-041 Prop Arm Assembly.

3.2 Grind flush the D2327-3 Spacer Bushing from the end of the basket base. Touch up paint per ICA-D205-541, Section 5.1.5.

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